UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Toxicological Review of HW39 Data — 26 March 2012
Dimock, PA

FROM: Dawn A. Ioven, toxicologist
Technical Support Branch (3HS41)

TO: Rich Fetzer, OSC
Eastern Response Branch (3HS31)

On 3 February 2012, U.S. EPA collected water samples from HW39 in Dimock. The samples were analyzed for over 200 constituents, including volatile organic compounds, semi-volatile compounds, metals and bacteria. The analytical results were then validated and compared to risk-based screening levels and/or standards for public drinking water supplies.

Barium

Samples collected from HW39 contained barium at concentrations of 3530 ug/L (wellhead), 3630 ug/L (filtered), and 3810 ug/L (kitchen sink). These levels marginally exceed the risk-based screening level for barium (2900 ug/L, at a Hazard Quotient of 1). The Hazard Quotient associated with long-term exposure to the barium concentration observed at the tap is 1.3. The Federal drinking water standard for barium in public water supplies is 2000 ug/L.

Sodium

Samples collected from HW39 contained sodium at concentrations of 47,400 ug/L (wellhead), 47,900 ug/L (filtered), and 49,300 ug/L (kitchen sink). A quantitative assessment of risk cannot be performed for sodium; however, U.S. EPA has a non-enforceable Health Advisory of 20,000 ug/L for sodium in drinking water. This value is based on recommendations for individuals on sodium-restricted diets.

No other constituents were detected at levels of concern in this well.